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Objectives for Circulation Planning in The Area Designated As Downtown North

A. To improve the existing circulation system to the degree required for efficient flow of future traffic loads.

B. To provide a major street system compatible with the extensive redevelopment and future land use requirements throughout the area.

(Lacks maps, Oct 2000)

I. M. Pei & Associates, Architects and Planners
Barton-Aschman Associates, Inc., Traffic Consultants
June 1961

Two-fold Result of An Improved Arterial Roadway System in Downtown North

1. Surface traffic is directed into well-defined arterial channels. This system will eliminate the haphazard filtration of traffic through all streets in the area.

2. Consolidation of the street system in the area of Government Center results in large-scale building sites which are more suitable to the present-day needs of public and private enterprise.

Map A illustrates in diagrammatic form the arterial network of proposed and existing roadways.

The overlay to Map A highlights the four north/south and the four east/west channels intended to carry future traffic into and through the constricted area between Beacon Hill and the Waterfront.

In a more or less north/south direction, traffic flow would be accomodated in the following channels:

- Cambridge/Tremont
- Congress/Merrimac
- Surface route beneath the Central Artery linked to the Charlestown Bridge via Washington Street.
- A roadway along the Waterfront in the alignment of Atlantic Avenue linked to Dorchester Street.

In a more or less east/west direction, traffic would flow on the following surface arterial routes:

- Along Causeway
- A one-way pair in the vicinity of Chardon and Sudbury
- State/Court.

Map B delineates the area of Government Center and surroundings. Central Artery and arterials immediately tangent are shown as they relate to the actual street pattern and to redeveloped areas. Number of lanes, direction of flow and daily volume distribution are noted for each arterial and the Central Artery.

Certain traffic flow patterns in this area are established and cannot be significantly altered because of a number of given conditions. Fixed installations such as the Central Artery Interchange, the two tunnel entrances and various surface streets in the adjacent area cannot be eliminated, and are susceptible to only slight modification. The most critical problem area is the juncture of Central Artery with the tunnels.

Several modifications and additions are proposed at this juncture point in order to handle both Central Artery and tunnel traffic.

Map C illustrates both the existing and proposed Artery Interchange which functions as a highly channelized traffic circle on two levels.

Suggested modifications to the existing conditions tie into the new pattern of streets in Government Center and Downtown North and are tabulated on the following pages. All conditions remain as they are in the Artery Interchange, except for five modifications and two new additions. For comparison purposes, the roadway designations correspond to Map C designations.

MAP C

Roadway Designation	Description	TRAFFIC SERVED			Status	Notes
		From	Direction	To		
A_1	Elevated roadway & down-ramp	Central Artery & Surface Arterial	Northbound	Washington St. & Chardon St.	Proposed	Overpasses, therefore avoids conflict with tunnel traffic. Requires clearance of Cross St. frontage.
M_1	Up-ramp	State St. & surface arterial	North	Central Artery N. & to Ramp F_1	Existing, to be modified	Existing ramp joined to Ramp N and widened north of juncture.
N_1	Down-ramp	Central Artery	North	Washington & Chardon via Ramp A_1	Existing, to be modified	Existing Ramp N's surface connection with roadways eliminated.
P	Down-ramp	Central Artery	North	Tunnel	Existing	
B	Surface roadway	Tunnel exit or from Hanover	West or South	Chardon St. Ramp F_1, South on artery, Roadway J_1 south on surface artery		

Roadway Designation	Description	TRAFFIC SERVED			Status	Notes
		From	Direction	To		
C	Up-ramp	Tunnel and Washington & New Sudbury (via roadway G_1	North	Central Artery	Existing	
D	Main line Central Artery	---	North	---	Existing	
E	Main line Central Artery	---	South	---	Existing	
AN	Surface arterials under Central Artery	---	North	Tunnel; Central Artery via M_1; Washington & Chardon via M_1&A_1	Existing	
AS	Surface arterials under Central Artery	Tunnel via roadways B and J_1, Central Artery via Ramp H	South	---		
F_1	Up-ramp	Tunnel exit via roadway B, Washington, New Sudbury	South	Central Artery South	Existing, to be modified	Existing Ramp F moved closer to Central Artery in order to accomodate Roadway G_1

MAP C

Roadway Designation	Description	TRAFFIC SERVED			Status	Notes
		From	Direction	To		
G_1	Surface Roadway	Washington, New Sudbury	East, North	Tunnel entrance Central Artery via Ramp C	Proposed	
H	Down-ramp	Central Artery	South	Tunnel Surface Arterial	Existing	
J_1	Surface Roadway	Washington, New Sudbury, Tunnel	South	Surface Arterial AS	Existing, to be modified	Makes use of part of Blackstone St. Street R.O.W.
K_1	Surface roadway	---	South	----	Existing	Part of Blackstone, to continue as local service street.

The proposed plan eliminates two ramps now serving the Central Artery. Their removal will improve the flow of expressway traffic which is now impeded by the excessive frequency of ramp locations. These encourage short-haul movements which properly belong on surface streets.

1. Ramp L: Traffic using this ramp leading to Central Artery southbound is adequately served by Ramp F-1. Ramp L is therefore eliminated.

2. Ramp R: Northbound up from Northern Avenue to the Central Artery is also eliminated. Traffic now using this ramp is served in the proposed interchange by Ramp M-1 at State Street.